

APPENDIX D:

Complete list of suspected sources of impairment used in U.S. EPA's Assessment Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS) database.

Suspected Sources Of Impairment
Above Ground Storage Tank Leaks (Tank Farms)
Accidental Release/Spill
Acid Mine Drainage
Agricultural Return Flows
Agricultural Water Diversion
Agriculture
Airports
Animal Feeding Operations (NPS)
Animal Holding/Management Areas
Animal Shows And Racetracks
Anthropogenic Land Use Changes
Aquaculture (Not Permitted)
Aquaculture (Permitted)
Atmospheric Deposition
Atmospheric Deposition - Acidity
Atmospheric Deposition - Nitrogen
Atmospheric Deposition - Toxics
Auction Barns
Ballast Water Releases
Barge Canal Impacts
Baseflow Depletion From Groundwater Withdrawals
Brownfield (Non-NPL) Sites
Cargo Loading/Unloading
CERCLA NPL(Superfund) Sites
Changes In Ordinary Stratification And Bottom Water Hypoxia/Anoxia
Changes In Tidal Circulation/Flushing
Channel Erosion/Incision From Upstream Hydromodifications
Channelization
Chemical Leak/Spill
Clean Sediments
Coal Mining
Coal Mining (Subsurface)
Coal Mining Discharges (Permitted)
Combined Sewer Overflows
Commercial Districts (Industrial Parks)

Suspected Sources Of Impairment
Commercial Districts (Shopping/Office Complexes)
Commercial Harbor And Port Activities
Confined Animal Feeding Operations - CAFOS (Point Source)
Confined Animal Feeding Operations (NPS)
Construction
Construction Stormwater Discharge (Permitted)
Contaminated Groundwater
Contaminated Sediments
Contribution From Downstream Waters Due To Tidal Action
Cooling Water Intake Structures (Impingement Or Entrainment)
Cranberry Production
Crop Production (Crop Land Or Dry Land)
Crop Production (Irrigated)
Crop Production (Non-Irrigated)
Crop Production With Subsurface Drainage
Dairies
Dam Construction (Other Than Upstream Flood Control Projects)
Dam Or Impoundment
Deicing (Storage/Application)
Discharges From Biosolids (Sludge) Storage, Application Or Disposal
Discharges From Municipal Separate Storm Sewer Systems (MS4)
Discharges From Offshore Oil And Gas Exploration (Permitted)
Dredge Mining
Dredging (E.G., For Navigation Channels)
Drought-Related Impacts
Dry Weather Flows With NPS Pollutants
Erosion And Sedimentation
Erosion From Derelict Land (Barren Land)
Forced Drainage Pumping
Forest Roads (Road Construction And Use)
Freshets Or Major Flooding
Golf Courses
Grazing In Riparian Or Shoreline Zones
Groundwater Loadings
Habitat Modification - Other Than Hydromodification
Hardrock Mining Discharges (Permitted)
Harvesting/Restoration/Residue Management
Heap-Leach Extraction Mining
Highway/Road/Bridge Runoff (Non-Construction Related)
Highways, Roads, Bridges, Infrastructure (New Construction)

Suspected Sources Of Impairment
Historic Bottom Deposits (Not Sediment)
Historical Source, No Longer Present
Hydrostructure Impacts On Fish Passage
Illegal Dumps Or Other Inappropriate Waste Disposal
Illicit Connections/Hook-Ups To Storm Sewers
Impacts From Abandoned Mine Lands (Inactive)
Impacts From Geothermal Development
Impacts From Hydrostructure Flow Regulation/Modification
Impacts From Land Application Of Wastes
Impacts From Resort Areas
Impervious Surface/Parking Lot Runoff
Inadequate Instream Habitat
Industrial Land Treatment
Industrial Point Source Discharge
Industrial Thermal Discharges
Industrial/Commercial Site Stormwater Discharge (Permitted)
Internal Nutrient Recycling
Introduction Of Non-Native Organisms (Accidental Or Intentional)
Lake Fertilization
Landfills
Leaking Underground Storage Tanks
Legacy/Historical Pollutants
Littoral/Shore Area Modifications (Non-Riverine)
Livestock (Grazing Or Feeding Operations)
Loss Of Riparian Habitat
Loss Of Wetlands
Low Head Dams
Low Water Crossing
Managed Pasture Grazing
Manure Lagoons
Manure Runoff
Marina Boat Construction
Marina Boat Maintenance
Marina Dredging Operations
Marina Fueling Operations
Marina Related Shoreline Habitat Degradation
Marina/Boating Pumpout Releases
Marina/Boating Sanitary On-Vessel Discharges
Marinas And Recreational Boating
Mill Tailings

Suspected Sources Of Impairment
Mine Tailings
Mining
Motorized Watercraft
Mountaintop Mining
Municipal (Urbanized High Density Area)
Municipal Point Source Discharges
Municipal Point Source Impacts From Inadequate Industrial/Commercial Pretreatment
Natural Conditions - Water Quality Standards Use Attainability Analyses Needed
Natural Sources
Natural-Beaver Dams/Log Jams
Natural-Drought
Natural-Flood
Naturally Occurring Organic Acids
Natural-Snowmelt
Non-Metals Mining Discharges (Permitted)
Non-Point Source
NPS Pollution From Military Base Facilities (Other Than Port Facilities)
NPS Pollution From Military Port Facilities
Off-Road Vehicles
On-Site Treatment Systems (Septic Systems And Similar Decentralized Systems)
Open Pit Mining
Other Marina/Boating On-Vessel Discharges
Other Recreational Pollution Sources
Other Shipping Releases (Wastes And Detritus)
Other Spill Related Impacts
Other Turf Management
Package Plant Or Other Permitted Small Flows Discharges
Pesticide Application
Petroleum/Natural Gas Activities
Petroleum/Natural Gas Production Activities (Permitted)
Pipeline Breaks
Placer Mining
Point Source(S) - Unspecified
Pollutants From Public Bathing Areas
Post-Development Erosion And Sedimentation
Potash Mining
Rangeland Grazing
RCRA Hazardous Waste Sites
Recreation And Tourism (Non-Boating)
Reduced Freshwater Flows

Suspected Sources Of Impairment
Reduction In Baseflow
Releases From Waste Sites Or Dumps
Removal Of Riparian Vegetation
Residential Districts
Runoff From Forest/Grassland/Parkland
Rural (Residential Areas)
Salt Storage Sites
Saltwater Intrusion
Sand/Gravel/Rock Mining Or Quarries
Sanitary Sewer Overflows (Collection System Failures)
Seafood Processing Operations
Sediment Resuspension (Clean Sediment)
Sediment Resuspension (Contaminated Sediment)
Septage Disposal
Sewage Discharges In Unsewered Areas
Shallow Lake/Reservoir
Shipbuilding, Repairs, Drydocking
Silviculture Activities
Silviculture Harvesting
Silviculture, Fire Suppression
Site Clearance (Land Development Or Redevelopment)
Source Unknown
Sources Outside State Jurisdiction Or Borders
Specialty Crop Production
Spills From Trucks Or Trains
Streambank Erosion
Streambank Modifications/Destabilization
Subsurface (Hardrock) Mining
Surface Mining
Surface Water Diversions
Surface Water Withdrawals
Total Retention Domestic Sewage Lagoons
Transfer Of Water From An Outside Watershed
UIC Wells (Underground Injection Control Wells)
Unknown Point Source
Unpermitted Discharge (Domestic Wastes)
Unpermitted Discharge (Industrial/Commercial Wastes)
Unrestricted Cattle Access
Unspecified Domestic Waste
Unspecified Land Disturbance

Suspected Sources Of Impairment
Unspecified Unpaved Road Or Trail
Unspecified Urban Stormwater
Upstream Impoundments
Upstream Source
Upstream/Downstream Source
Urban Development In Riparian Buffer
Urban Runoff/Storm Sewers
Wastes From Pets
Water Diversions
Waterfowl
Watershed Runoff Following Forest Fire
Wet Weather Discharges (Non-Point Source)
Wet Weather Discharges (Point Source And Combination Of Stormwater, SSO Or CSO)
Wetland Drainage
Wildlife Other Than Waterfowl
Woodlot Site Clearance
Woodlot Site Management
Yard Maintenance